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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,225	03/01/2002	Ajay Kumar	5681-12000	6931

7590 11/22/2006

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EXAMINER

VU, THONG H

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,225

Applicant(s)

KUMAR ET AL.

Examiner

Thong H. Vu

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-42 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagle [5,790,425].

3. Claim 27, Wagle discloses A method comprising:

determining a subset of attributes in a client state of session data on a first application server that have been modified [Wagle, a multi-client benchmark testbed, accessing a file server, col 1 lines 49-65],

wherein the session data is accessible to one or more processes executing within the application server [Wagle, API develop various client-server protocol benchmark with different workloads, col 3 lines 50-55, Fig 4]; and

synchronizing a primary state of session data on a distributed store with the client

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state according to the subset of the attributes [Wagle, a prime client synchronizing the load while the benchmark is running, updates a file contains the parameters, col 2 lines 8-20],

wherein the primary state is accessible by a plurality of application servers including the first application server [Wagle, methods manipulate the instance variables to create a new state and new objects, col 4 lines 26-45; activate the workload objects which in response generate requests to the server, col 4 lines 46-65].

4. Claim 28, Wagle discloses performing a binary differencing of a binary representation of the client state and a binary representation of the benchmark of the client state to locate the modified attributes [Wagle, Java byte codes, update a benchmark results file, col 4 lines 46-65].

5. Claim 29, Wagle discloses performing an object graph differencing of an object graph representation of the client state and an object graph representation of the benchmark of the client state [Wagle, workload object, col 3 lines 30-48].

6. Claim 35, Wagle discloses A tangible computer accessible medium comprising software instructions computer-executable to implement:

determining a subset of attributes in a client state of session data on an first application server that have been modified [Wagle, a multi-client benchmark testbed, accessing a file server, col 1 lines 49-65],

wherein the session data is accessible to one or more processes executing within the first application server [Wagle, API develop various client-server protocol benchmark with different workloads, col 3 lines 50-55, Fig 4]; and

synchronizing a primary state of session data on a distributed store with the client state according to the subset of the attributes [Wagle, a prime client synchronizing the load while the benchmark is running, updates a file contains the parameters, col 2 lines 8-20],

wherein the primary state is accessible by a plurality of application servers including the first application server [Wagle, methods manipulate the instance variables to create a new state and new objects, col 4 lines 26-45; activate the workload objects which in response generate requests to the server, col 4 lines 46-65].

7. Claim 1, Wagle discloses A system, comprising:

a distributed store comprising a primary state of session data configured for access by a plurality of application servers, wherein the primary state of the session data comprises a plurality of attributes [Wagle, the prime client, col 2 lines 8-20; API develop various client-server protocol benchmark with different workloads, col 3 lines 50-55, Fig 4];

a first one of the application servers comprising a client state of the session data, wherein the application server is configured to provide access to the client state of the session data to processes executing within the application server [Wagle, a new state, col 4 lines 26-45];

wherein the system is configured to:

compare the client state to a benchmark of the client state to determine a subset of the attributes that have been modified in the client state [Wagle, compares the performance of various servers, col 1 lines 15-17];

synchronize the primary state with the client state according to the subset of the attributes [Wagle, synchronizing and updating the parameters, col 2 lines 8-20].

8. Claim 10 Wagle discloses A system, comprising:

a distributed store comprising a primary state of session data configured for access by a plurality of application servers, wherein the primary state of the session data comprises a plurality of attributes [Wagle, the prime client, col 2 lines 8-20; API develop various client-server protocol benchmark with different workloads, col 3 lines 50-55, Fig 4];

a first one of the application servers comprising a client state of the session data, wherein the application server is configured to provide access to the client state of the session data to processes executing within the application server [Wagle, a new state, col 4 lines 26-45];

wherein the system is configured to:

determine a subset of the attributes of the primary state of the session data that have been modified in the client state [Wagle, compares the performance of various servers, col 1 lines 15-17];

synchronize the primary state with the client state according the subset of the attributes that have been modified [Wagle, synchronizing and updating the parameters, col 2 lines 8-20].

9. Claim 19 Wagle discloses A system, comprising:

a distributed store comprising a primary state of session data configured for access by a plurality of application servers, wherein the primary state of the session data comprises a plurality of attributes [Wagle, the prime client, col 2 lines 8-20; API develop various client-server protocol benchmark with different workloads, col 3 lines 50-55, Fig 4];

a first one of the application servers comprising a client state of the session data, wherein the first application server is configured to provide access to the client state of the session data to processes executing within the application server [Wagle, a new state, col 4 lines 26-45];

means for determining a subset of the attributes of primary state of the session data that have been modified in the client state [Wagle, compares the performance of various servers, col 1 lines 15-17]; and

means for synchronize the primary state with the client state according to the subset of the attributes [Wagle, synchronizing and updating the parameters, col 2 lines 8-20].

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10. Claims 2,11 Wagle discloses the server configured to provide access to the session data on one or more client sessions of the system [Wagle, client-server, Fig 2].

11. Claims 3-4;12-13;20-21 contain the identical limitations set forth in claims 28-29. Therefore claims 3-4;12-13;20-21 are rejected for the same rationale set forth in claims 28-29.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-9;14-18,22-26,30-34,38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagle [5,790,425] in view of Logston et al [Logston, 6,687,735 B1].

12. Claim 30 Wagle discloses the first application server such as a benchmark manager application program using the object oriented methods [Wagle, col 4 lines 16-45]

However Wagle does not explicitly detail tracking accesses of the attributes of the client state; determining a subset of the tracked accessed attributes that have been modified in the client state; and

synchronizing the primary state with the client state according to the subset of the tracked accessed attributes.

It was well-known in the art that the object oriented methods provides mutable and tracking processes as taught by Logston [Logston, Fig 6]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the mutable and tracking processes as taught by Logston into the Wagle's apparatus in order to utilize the object-oriented methods. Doing so would provide the dfacilities for scaling of the distributed applications between the clients-servers [Logston, col 2 lines 1-23]

13. Claim 31, Wagle-Logston disclose tracking only mutable attributes [Wagle, mutable or transportable access as inherent feature of object oriented methods, col 4 lines 26-45].

14. Claim 32, Wagle-Logston disclose tracking only mutable accesses of the attributes of the client state, wherein mutable accesses comprise write accesses of any of the attributes of the client state [Logston, Fig 6].

15. Claim 33, Wagle-Logston disclose performing binary differencing of a binary representation of the tracked accessed attributes and a binary representation of the benchmark of the attributes of the client state to locate the modified tracked accessed attributes [Logston, Fig 6].

16. Claim 34, Wagle-Logston disclose performing an object graph differencing of an object graph representation of the tracked accessed attributes and an object graph representation of the benchmark of the attributes of the client state to locate the modified tracked accessed attributes [Logston, Fig 6].

17. Claims 5-9;14-18,22-26,38-42 contain the identical limitations set forth in claims 30-34. Therefore claims 5-9;14-18,22-26,38-42 are rejected for the same rationale set forth in claims 30-34.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong H. Vu whose telephone number is 571-272-3904. The examiner can normally be reached on 6:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thong Vu
Primary Examiner
Art Unit 2142



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